



DAYLIGHT AND SUNLIGHT

IMPACT ON NEIGHBOURING
PROPERTIES REPORT

2C Landrock Road

Mr Fawad Karimi

28 July 2023

GIA No: **18480**

PROJECT DATA:

Client **Mr Fawad Karimi**
Architect **HSSP Architects**
Project Title **2C Landrock Road**
Project Number **18480**

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DISCLAIMER:

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CONTENTS

USER TIP:

Click any heading to go directly to that content.

1	EXECUTIVE SUMMARY	2
2	THE SITE	3
3	POLICY & THE WIDER CONTEXT	4
4	BRE GUIDELINES	8
5	METHODOLOGY AND ASSUMPTIONS	15
6	ASSESSMENT RESULTS AND CONCLUSIONS	16
7	RESULTS AND WINDOW MAPS	18
8	CONCLUSIONS	21

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Return to the contents list from any page by clicking on the GIA logo.

1 EXECUTIVE SUMMARY

GIA have assessed the HSSP Architects scheme (the “Proposed Development”) for the 2C Landrock Road site to understand the potential changes in light to the relevant sensitive receptors.

GIA have been instructed by Mr Fawad Karimi to provide daylight and sunlight advice in relation to the 2C Landrock Road development, London Borough of Haringey. The project entails the erection of a new dwelling in a vacant site.

The aim of this report is to present results and conclusions of the technical daylight and sunlight assessment of the proposed scheme. This is with regards to the potential effect of the development on the amenity of the relevant neighbouring receptors.

A total of three sensitive receptors have been identified and are illustrated in Section 06 (Figure 07) of this report:

- 115 Ferme Park Road
- 117 Ferme Park Road
- 2 Landrock Road

The technical analysis has been conducted according to the criteria and methodology introduced by the Building Research Establishment in their handbook (BR209, 2022), which states that the guidance *is advisory and the numerical target values within it may be varied to meet the needs of the development and its location.*

The analysis was undertaken in the Existing vs Proposed scenarios. It compares the daylight and sunlight levels experienced by the neighbouring properties in the existing condition with those following the implementation of the proposed development.

When considering the neighbouring residential properties, 29 windows serving 18 rooms have been assessed. All windows and rooms assessed (100%) meet the BRE guidance for VSC, NSL and APSH.

To conclude, as the analysis results comply with BRE guidance, the occupants of these buildings are unlikely to notice any change in their daylight and sunlight amenity as a consequence of the construction of the proposed development. Therefore, these results are considered to be excellent.

2 THE SITE

GIA have been instructed to review and advise on the daylight and sunlight impacts associated with the implementation of the proposed development at 2C Landrock Road.

THE SITE

The site is located in a very accessible area within the London Borough of Haringey, in Greater London. The proposed development is about 15 minutes' walk from Harringay and Hornsey train stations, as well as from Crouch Hill London Overground station.

It has the following immediate residential properties as neighbours:

- To the East, 115-117 Ferme Park Road
- To the South, 5-11 (odd) Landrock Road
- To the West, 2 Landrock Road

The vacant site comprises a fenced, empty plot located to the rear of 115 Ferme Park Road and to the right side of 2 Landrock Road. Figure 01 below illustrates the Site.

PROPOSED DEVELOPMENT

The proposed development entails the erection of a new dwelling.

GIA's understanding of the Proposed Development is illustrated in Figure 02.

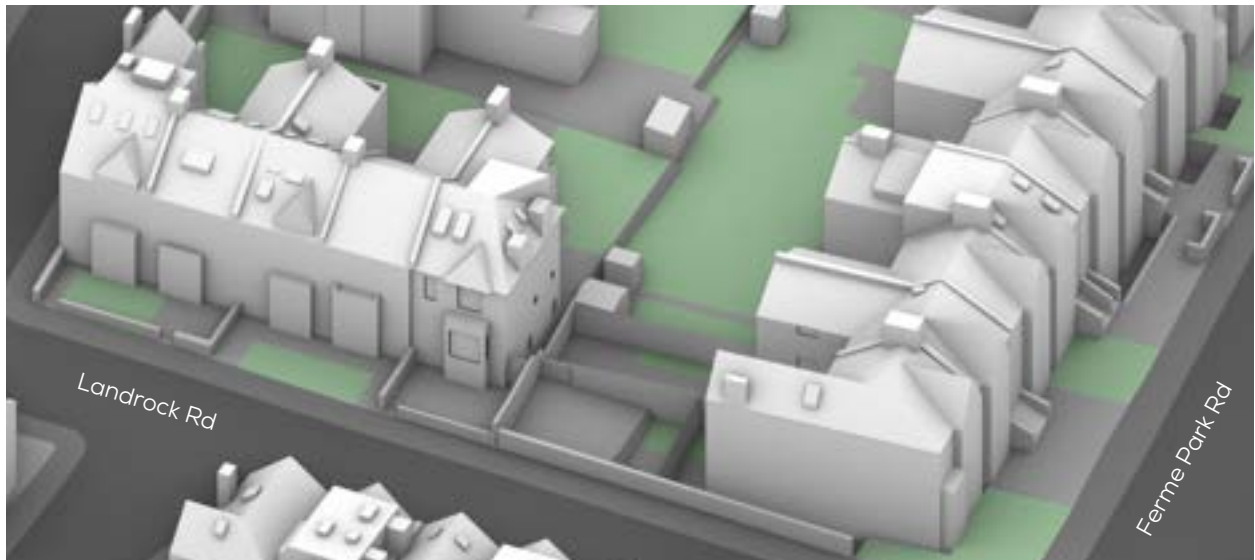


Figure 01: 3D model of the site and Existing Property



Figure 02: 3D Perspective View of the Proposed Scheme

3 POLICY & THE WIDER CONTEXT

Below we have detailed sections from the following documents as they are, in our opinion, the most pertinent in relation to daylight and sunlight matters and how we have approached the effects of the Proposed Development on the relevant neighbouring properties:

- National Planning Policy Framework (July 2021);
- National Planning Practice Guidance (updated June 2021);
- The London Plan (March 2021) (Greater London Authority);
- The London Plan Housing SPG (March 2016, updated 2017) (Greater London Authority);
- Sustainable Design and Construction Supplementary Guidance (2014);
- Haringey Local Plan (July, 2017).

NATIONAL PLANNING POLICY FRAMEWORK (JULY 2021)

The NPPF (July 2021) states that local planning authorities should refuse applications which they consider fail to make efficient use of land. The discussion in relation to daylight and sunlight highlights the Government's recognition that increased flexibility is required in response to the requirement for higher density development:

"Local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)".

NATIONAL PLANNING PRACTICE GUIDANCE (JUNE 2021)

In light of the update to the Government's Planning Practice Guidance, GIA have considered the relevant paragraphs which relate to daylight and sunlight.

Paragraph 6 of the NPPG (Ref ID: 66-006-20190722) acknowledges that new development may cause an effect on daylight and sunlight levels

enjoyed by neighbouring occupiers. It requires local authorities to assess whether the effect to neighbouring occupiers would be "unreasonable".

Paragraph 7 (Ref ID: 66-007-20190722) refers to the wider planning considerations in assessing appropriate levels of daylight and sunlight. The test is whether living standards are 'acceptable' and recognises that acceptability will depend to some extent on context.

THE LONDON PLAN (MARCH 2021)

The London Plan was published in March 2021 and sets out the integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

The supporting text for Policy D1 (London's form, character and capacity for growth) states that:

"As change is a fundamental characteristic of London, respecting character and accommodating change should not be seen as mutually exclusive. Understanding of the character of a place should not seek to preserve things in a static way but should ensure an appropriate balance is struck between existing fabric and any proposed change. Opportunities for change and transformation, through new building forms and typologies, should be informed by an understanding of a place's distinctive character, recognising that not all elements of a place are special and valued."

Part A of Policy D2 (Infrastructure requirements for sustainable densities) states that:

"The density of development proposals should:

- 1) consider, and be linked to, the provision of future planned levels of infrastructure rather than existing levels*
- 2) be proportionate to the site's connectivity and accessibility by walking, cycling, and public transport to jobs and services (including both PTAL and access to local services)"*

Part D of Policy D6 (Housing Quality and Standards) (CD-4.22) states that the design of development:

“should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space.”

It is clear that the GLA's focus is on sufficient or retained daylight and sunlight to neighbouring properties and highlights that context will be a consideration to determine sufficiency.

HOUSING SUPPLEMENTARY PLANNING GUIDANCE “HOUSING SPG” (LONDON PLAN, MARCH 2016, UPDATED IN 2017)

The Mayor published the Housing SPG in March 2016. The SPG remains extant and relevant and provides guidance on sunlight and daylight issues in London.

The SPG clearly moves away from the rigid application of the national numerical values provided in the BRE Guidelines:

“An appropriate degree of flexibility needs to be applied when using BRE Guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time.”

“The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on

large sites may necessitate standards which depart from those presently experienced but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm.”¹

A more flexible and holistic approach to the strict national numerical standards is thus required within developments if they are to make their appropriate contribution to meeting spatial needs.

The requirement in London for significantly more living and working spaces necessitates development and thus greater density:

“BRE guidelines on assessing daylight and sunlight should be applied sensitively to higher density development in London, particularly in central and urban settings, recognising the London Plan’s strategic approach to optimise housing output (Policy 3.4) and the need to accommodate additional housing supply in locations with good accessibility suitable for higher density development (Policy 3.3). Quantitative standards on daylight and sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London.”²

The Housing SPG, while published in advance of the updated NPPF (2021), London Plan 2021 and the updated BRE Guidelines 2022, still provides the most relevant and up to date guidance in relation to the application and interpretation of daylight, sunlight and overshadowing matters in London. The NPPF, NPPG and London Plan tie in with it in their design-led and evidence-based approach, thus keeping the Housing SPG relevant and up to date.

The Housing SPG clearly outlines the need to move away from applying the same amenity daylight and sunlight benchmark values in all locations irrespective of whether they are suburban or dense city centres.

1 Greater London Authority. (2016). Housing Supplementary Planning Guidance. London: Greater London Authority, para 1.3.46 pg 53

2 Greater London Authority. (2016). Housing Supplementary Planning Guidance. London: Greater London Authority, p 87-88 para 2.3.47

It promotes the adoption of contextual analyses as an important way of arriving at appropriate levels of amenity associated with a development, including daylight and sunlight. It requires results to be considered against the context of similar locations and development typologies in the relevant borough and across London.

The BRE Guidelines 2022 maintains the reference to use judgment and flexibility in its application; it is not just numerical matters which are relevant but also contextual matters. The BRE Guidelines endorses the need for alternative target values in certain contexts and provides clear guidance on this within its Appendix F. In short, acceptability of a given development is not to be equated to 'meeting' the values within the BRE Guidelines. Rather the latter is one of many tools which assists the wider judgement of whether a scheme and its effects are acceptable or not.

SUSTAINABLE DESIGN & CONSTRUCTION SUPPLEMENTARY PLANNING GUIDANCE (2014)

Section 2.3 of the SPG provides guidance on key areas such as site layout and micro-climate in relation to site layout and building design.

With regard to site layout, paragraph 2.3.6 refers to measures to reduce carbon dioxide emissions *"include enabling access to daylight and sunlight for uses that require [light]."* In addition, the guidance states that *"site planning can minimise the impact of the shadow created by the new buildings to protect existing features such as open space and renewable solar technologies on roofs."* It goes on to say that *"developers should ensure the layout of their site and buildings maximises the opportunities provided by natural systems, such as light."*

Paragraph 2.3.8 of the SPG continues with effects on the micro-climate caused by new buildings which include *"overshadowing and reducing access to sunlight."*

The guidance states that the above effects should *"be considered during the design of a development and assessed once the designed is finalised."*

HARINGEY LOCAL PLAN (2017)

The Haringey Local Plan was adopted in July 2017. It is currently made up of Strategic Policies, Development Management Policies, Site Allocations and the Tottenham Area Action Plan. These are statutory planning documents that contain policies and site allocations, which are used to determine planning applications in the borough.

4 BRE GUIDELINES

The Building Research Establishment (BRE) have set out in their handbook 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (BR209, 2022)', guidelines and methodology for the measurement and assessment of daylight and sunlight.

BACKGROUND & CONTEXT

- A 2.1 The quality of daylight and sunlight amenity is often stipulated within planning policy, aiming for protection, concern or enhancement of adjoining owners and other interested parties.
- A 2.2 The BRE Guidelines provide advice on site layout planning to determine the quality of daylight and sunlight, both within buildings and that reaching open spaces.
- A 2.3 The BRE Guidelines note that the document is intended to be used in conjunction with the interior daylight recommendations found within the British Standard Daylight in buildings, BS EN 17037 and the CIBSE Publication LG 10 Daylighting – a guide for designers.
- A 2.4 Whilst the BRE Guidelines are typically referred to for daylight, sunlight and overshadowing matters within the planning process, they were not intended to be used as an instrument of planning policy, nor were the figures intended to be fixedly applied to all locations.
- A 2.5 In the introduction of 'Site Layout Planning for daylight and sunlight (2022)', section 1.6 (page 7), states that:
- "The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".*
- A 2.6 Paragraph 2.2.3 (page 14) of the document states:
- "Note that numerical values given here are purely advisory. Different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints".*
- A 2.7 The numerical criteria suggested by the BRE are therefore designed to provide industry advice/guidance to plan/design with daylight in mind. Alternative values may be appropriate in certain circumstances such as highly dense urban areas.
- A 2.8 Paragraph 2.2.2 (page 14) of the BRE Guidelines states:
- "intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens, and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas, and garages need not be analysed."*
- A 2.9 Although primarily designed to be used for residential properties, the BRE Guidelines continue to state that these may be applied to any existing non-residential buildings where there may be a reasonable expectation of daylight, including; schools, hospitals, hotels and hostels, small workshops, and some offices.
- A 2.10 Many Local Planning Authorities consider daylight and sunlight an important factor for determining planning applications. Policies refer to both the protection of daylight and sunlight amenity within existing properties and areas of amenity, as well as in the creation of proposed dwellings and spaces with high levels of daylight and sunlight amenity.
- A 2.11 Although Local Authorities will look at the BRE Guide to understand effects of light changes, it is their Planning Policies that will determine whether the changes in light levels should be a reason for refusal.
- A 2.12 It is an inevitable consequence of the built-up urban environment that daylight and sunlight will be more limited in dense urban areas. It is well acknowledged that in such situations there may be many other conflicting and potentially more important planning and urban design matters to consider, other than just the provision of ideal levels of daylight and sunlight.
- A 2.13 The following sections extract relevant sections from the Guide.

EFFECTS TO DAYLIGHT

- A 2.14 BRE guidelines provide two methods to assess daylight effects upon neighbours, namely;
- 1 The Vertical Sky Component (VSC); and
 - 2 The No Sky Line (NSL).

Vertical Sky Component (VSC)

- A 2.15 The Vertical Sky Component (VSC) method is described in the Glossary of BRE Guidelines as the:
- "Ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from a CIE standard overcast sky, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. Usually the 'given vertical plane' is the outside of a window wall. The VSC does not include reflected light, either from the ground or from other buildings"*
- A 2.16 Put simply, the VSC provides an assessment of the amount of skylight falling on a vertical plane (generally a window) directly from the sky, in the circumstance of an overcast sky (CIE standard).
- A 2.17 The national numerical "ideal" target value for VSC is 27%. The BRE Guidelines advise that upon

implementation of a development, a window should retain a VSC value of 27% or at least 0.8 of its former value (i.e. no more than a 20% change) as per paragraph 2.2.23 of the Guide.

- A 2.18 This form of assessment does not take into account window size, room use, room size, window number or dual aspect rooms. The assessment also assumes that all obstructions to the sky are 100% non-reflective, thereby omitting the consideration of reflection, and considering only the light coming directly from the sky.
- A 2.19 The VSC calculation is undertaken in both the existing and proposed scenarios so as to make a comparison.
- A 2.20 The image in Figure 03 depicts a Waldram Diagram which can be used to calculate the VSC. The existing buildings are solidly pictured and the proposed scheme appears semi-transparent in the foreground.

No Sky Line (NSL)

- A 2.21 In addition to the VSC, the BRE recommends the NSL method of assessment where internal layouts are known. Whilst the VSC provides information on the quantum of light reaching a window, the NSL seeks to provide information on how well this light is

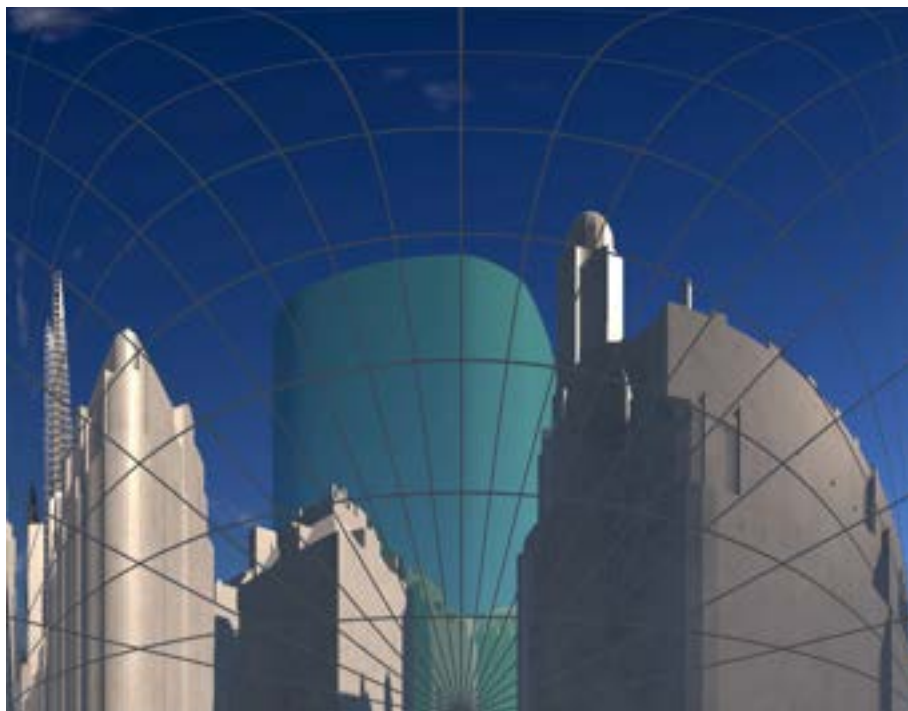


Figure 03: Waldram diagram

distributed within the room. The NSL is sometimes also referred to as 'Daylight Distribution' for this reason.

if the no sky line encroaches on key areas like kitchen sinks and worktops."

A 2.22 The NSL is defined in the Glossary of the Guide as *"the outline on the working plane of the area from which no sky can be seen."* and so the NSL is effectively an assessment of sky visibility within a room. As stated already, the calculation is undertaken across the working plane in accordance with paragraph 2.2.10 *"in houses [...] is assumed to be horizontal and 0.85m high"*.

A 2.23 Again, both the existing and proposed positions are calculated and presented alongside any change in position of the NSL. The results can then be presented in a table format or else illustrated on a contour plot if required.

A 2.24 The BRE Guidelines state at paragraph 2.211 that:
"If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit. This is also true

A 2.25 In accordance with the strict application of the national numerical values, therefore the change in daylight would be noticeable to the occupants should the NSL experience a loss of NSL greater than 20%.

A 2.26 It is relevant to note that this assessment takes the number and size of windows serving a room into account, as well as the shape of the room. However, being concerned only with sky visibility and the distribution of light, it does not consider the quantum of light reaching the room.

Decision Chart (Figure 20 of the BRE Guide)

A 2.27 The flowchart in Figure 04 illustrates the steps and criteria outlined by the BRE Guidelines to understand whether the daylight amenity (VSC and NSL) may be significantly affected.

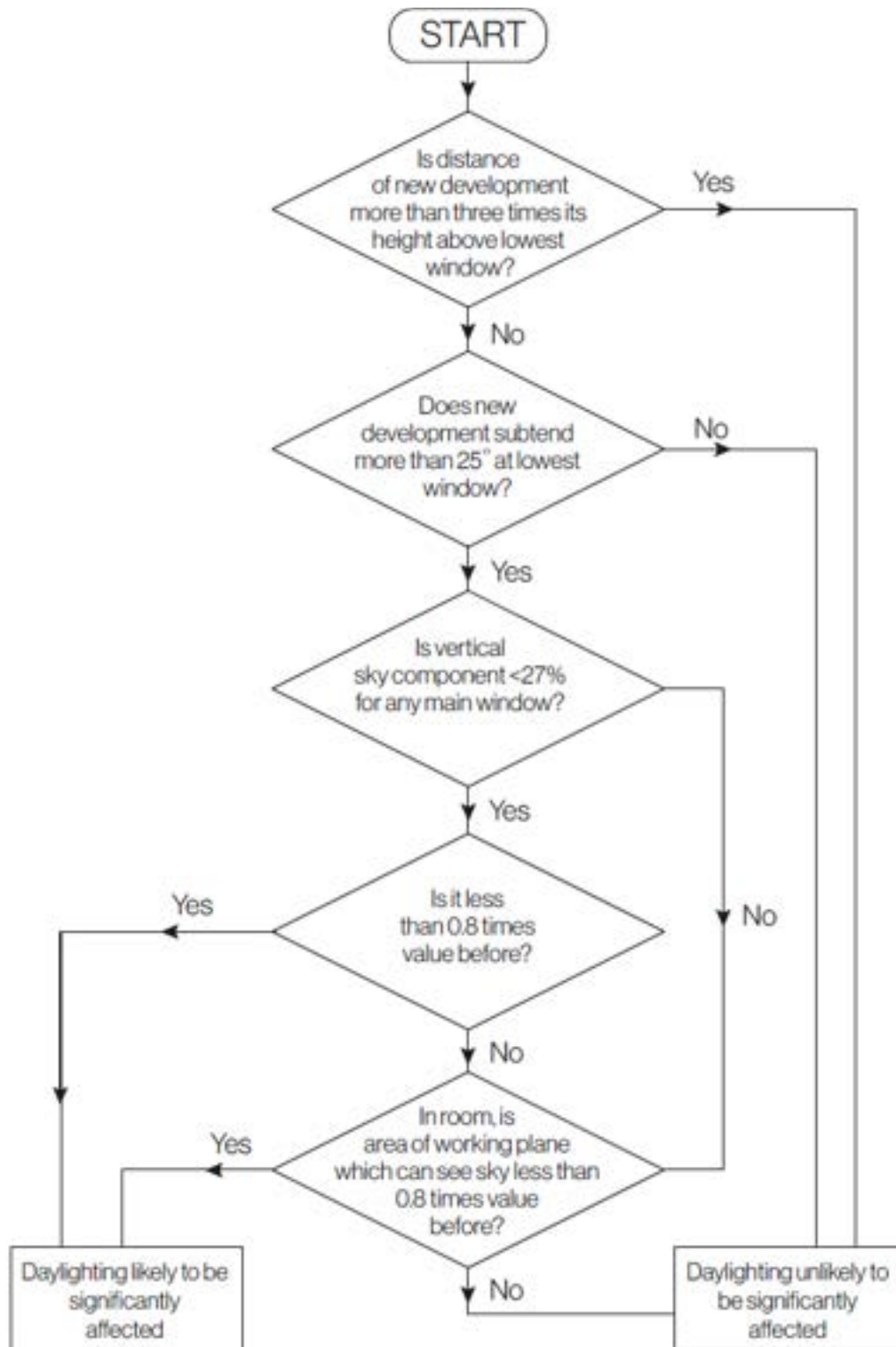


Figure 04: BRE Decision Chart (Figure 20): diffuse daylight in existing buildings. This does not include an assessment of rights to light issues, which a developer may need to consider separately

EFFECTS TO SUNLIGHT

Annual Probable Sunlight Hours (APSH)

A 2.28 The BRE Guidance suggests that to understand sunlight effects to a property, an assessment of Annual Probable Sunlight Hours (APSH) is undertaken. The APSH is defined in the Glossary as:

"the long-term average of the total number of hours during a year in which direct sunlight reaches the unobstructed ground (when clouds are taken into account)"

A 2.29 Expanding on the above within the Guidance, long-term averages were used to position 100 spots in the sky, representative of sunlight over the whole year. Correlating to the probability of the sun to shine, the majority of these (70) are at times to the six-months containing summer (from spring equinox to autumn equinox) and the other 30 are the 'winter' months (from autumn equinox to spring). The APSH is calculated by determining how many of these 'spots' can be seen from a location (normally a window), both overall and during the winter months.

A 2.30 Therefore, to understand the potential sunlight effects, all windows facing within 90 degrees of due south and overlooking the development are generally assessed for APSH.

A 2.31 The BRE Guidelines set out the methodology and criteria for the assessment of Sunlight in Chapter 3. The BRE Guidelines state in paragraph 3.2.3 and 3.2.5:

"To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun."

"A point at the centre of the window on the outside face of the window wall may be taken."

A 2.32 In interpreting the results, the BRE Guidance states in summary 3.2.13 that:

"If a living room of an existing dwelling has a main window facing within 90° of due south, and any part of a new development subtends an angle of more than 25° to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected. This will be the case if the centre of the window:

- receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March, and*
- receives less than 0.8 times its former sunlight hours during either period; and*
- has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours."*

A 2.33 The image in Figure 05 depicts the APSH sun spots overlaid on a Waldram Diagram. The existing buildings are solidly pictured and the proposed scheme appears semi-transparent in the foreground. The yellow spots indicate summer sun and the blue ones indicate winter sun.



Figure 05: Waldram diagram

5 METHODOLOGY AND ASSUMPTIONS

In order to undertake the daylight and sunlight assessments set out in the previous pages, we have prepared a three dimensional computer model and used specialist lighting simulation software.

The three dimensional model of the proposed development has been created using the scheme drawings and model provided to us by HSSP Architects. This has been placed in the context of its surrounding buildings, which have been modelled from photogrammetric survey, Ordnance Survey maps and aerial photographs.

Within the three dimensional model above, windows were then inserted within the relevant neighbouring properties with reference to:

- *Real estate agencies websites diligence;*
- *Drawings obtained from the London Borough of Haringey's planning portal;*
- *Land Registry searches;*
- *Site photographs and observations; and*
- *Brick counting techniques.*

Where no information for a property was available, the property was modelled with reference to information on buildings in close proximity and of similar typology. In addition, reasonable assumptions as to the internal layouts of the rooms behind the fenestration have been made. This is normal practice where access to adjoining properties is undesirable in terms of development confidentiality. Unless the building form dictates otherwise, we assume a standard 4.2m deep room (14ft) for residential properties. GIA have sought to create the most accurate 3D model possible based on the data available, however, a degree of tolerance should be applied.

In particular, 2 Landrock Road has been modelled based on the information available from letting agencies (Appendix 6). Drawings for 115 Ferme Park Road have been download from the planning portal London Borough of Haringey, reference number HGY/2019/2824 and HGY/2021/0860.

The scope of buildings assessed has been determined as a reasonable zone which considers both the scale of the proposed scheme and the proximity of those buildings which surround and face the site. Any other property surrounding the site is unlikely to be affected by the proposed development.

Floor levels have been assumed for adjoining properties as access has not been obtained. This dictates the level of the working plane which is the point at which the No Sky Line assessments are

carried out. GIA have discounted rooms that appear to be or are confirmed to be bathrooms, hallways, circulation space etc. These rooms are not considered to be habitable and thus do not require assessment in accordance with the BRE Guidelines.

A PV Panel assessment is not considered relevant as no solar panels have been identified in close proximity to the site.

With regards to daylight, the neighbouring properties have been assessed for Vertical Sky Component (VSC) and No-Sky Line (NSL) as suggested by the BRE guidance.

The effects of sunlight have been assessed by means of Annual Probable Sun Hours (APSH) and Winter Probable Sun Hours (WPSH) for all windows facing within 90 degrees of due south.

6 ASSESSMENT RESULTS AND DISCUSSION

This section details the daylight and sunlight effects in relation to the relevant properties neighbouring the Site.

RELEVANT SENSITIVE RECEPTORS

GIA have identified the following properties as potential sensitive receptors for daylight and sunlight assessment:

- 115 Ferme Park Road
- 117 Ferme Park Road
- 2 Landrock Road
- 5-11 (odd) Landrock Road

However, as recommended by BRE, a test consisting of a 25-degree plane measured from the centre of the lowest windows on the opposite side of Landrock Road has been undertaken. Results show that properties at 5, 7, 9, and 11 Landrock Road fall below this 25 degree plane (Figure 06) and therefore, are not expected to be affected by the proposed development.

Relevant residential property locations are illustrated in Figure 07.

The results of the daylight and sunlight assessments are presented in the following section of this report. In addition, to assist the reader understanding the surrounding properties and window locations, we have produced window maps for each property assessed.

DISCUSSION OF RESULTS

Daylight

All relevant residential surrounding properties were assessed for both VSC and NSL as recommended by BRE. The three properties remain 100% BRE compliant in relation to daylight as the assessed levels of VSC and NSL are minimally affected as a result of the proposed development.

Sunlight (APSH)

No losses of sunlight beyond the recommended thresholds can be seen for any of the three relevant residential surrounding properties. Therefore, remain 100% BRE compliant for the Annual Probable Sunlight Hour (APSH) test in the existing vs proposed scenario.

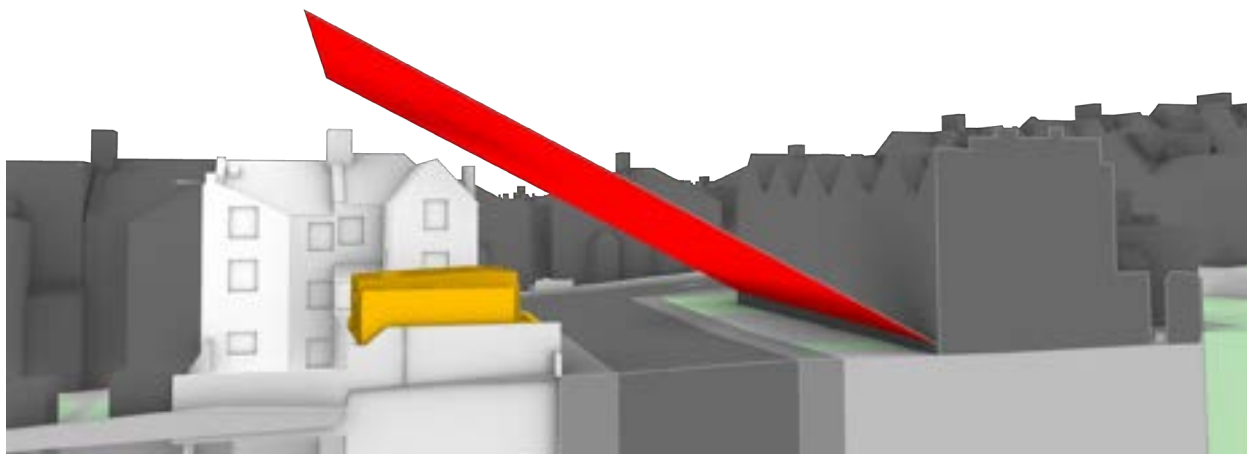


Figure 06: Sensitive receptors map by compliance



Figure 07: Sensitive receptors map

7 RESULTS AND WINDOW MAPS

2 LANDROCK ROAD

2 Landrock Road is a residential property comprised of two split-level apartments, located directly to the West of the Proposed Development.

Existing vs Proposed

PROJECT NO: 18480
RELEASE: 01
EXISTING V PROPOSED

DAYLIGHT AND SUNLIGHT ANALYSIS
2C LANDROCK RD

					VSC (WINDOWS)				NSL				ANNUAL PROBABLE SUNLIGHT HOURS					
FLOOR	FLAT	ROOM	ROOM USE	WINDOW	EXISTING	PROPOSED	LOSS	%	EXISTING	PROPOSED	LOSS	%	ROOM EXISTING	ROOM PROPOSED	TOTAL	WINTER		
													TOTAL	WINTER	TOTAL	WINTER	% LOSS	% LOSS
LANDROCK 2																		
B00	B	R1	BEDROOM	W1	25.7	24.1	1.6	6.2	40.2	40.2	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
		R2	BEDROOM	W2	24.2	19.7	4.5	18.6	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
F00	B	R1	LIVING ROOM	W1	13.7	13.7	0.0	0.0	99.9	99.9	0.0	0.0	81	25	81	25	0	0
				W2	32.3	32.3	0.0	0.0										
				W3	18.3	17.9	0.4	2.2										
				W4	26.1	26.1	0.0	0.0										
				W5	25.9	25.9	0.0	0.0										
F01	A	R1	BEDROOM	W1	32.0	32.0	0.0	0.0	98.8	98.8	0.0	0.0	77	27	77	27	0	0
				W2	30.2	30.2	0.0	0.0										

Window Map

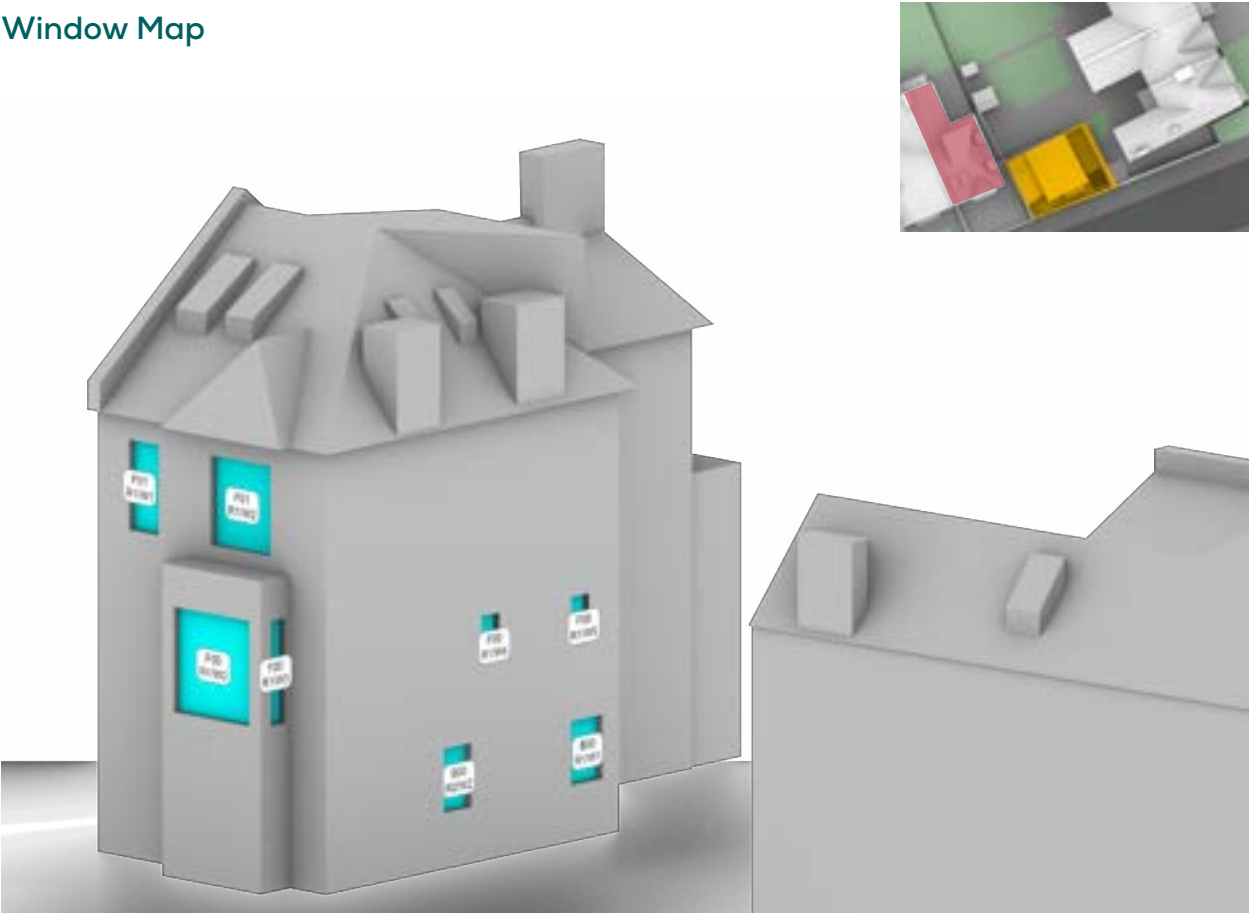


Figure 08: Window Map 2 Landrock Road

115 FERME PARK ROAD

115 Ferme Park Road is a residential property comprised of eight self-contained flats, located directly to the East of the Proposed Development.

Existing vs Proposed

PROJECT NO: 18480
RELEASE: 01
EXISTING V PROPOSED

DAYLIGHT AND SUNLIGHT ANALYSIS
2C LANDROCK RD

					VSC (WINDOWS)				NSL				ANNUAL PROBABLE SUNLIGHT HOURS					
FLOOR	FLAT	ROOM	ROOM USE	WINDOW	EXISTING	PROPOSED	LOSS	%	EXISTING	PROPOSED	LOSS	%	ROOM EXISTING		ROOM PROPOSED		TOTAL % LOSS	WINTER % LOSS
													TOTAL	WINTER	TOTAL	WINTER		
FERME PARK 115																		
B00	O	R1	KITCHEN	W1	10.6	9.8	0.8	7.5	100.0	100.0	0.0	0.0	9	1	8	0	11.1	100
F00	B	R1	KITCHEN	W1	12.4	12.4	0.0	0.0	90.6	90.6	0.0	0.0	44	14	40	11	9.1	21.4
				W2	28.8	25.0	3.8	13.2										
	C	R2	STUDIO	W3	12.5	12.5	0.0	0.0	72.6	72.6	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
		R3	KITCHEN	W4	16.6	16.3	0.3	1.8	100.0	100.0	0.0	0.0	17	1	17	1	0	0
F01	D	R1	STUDIO	W1	12.1	12.1	0.0	0.0	98.0	98.0	0.0	0.0	54	17	54	17	0	0
				W2	22.3	22.3	0.0	0.0										
				W3	32.3	32.3	0.0	0.0										
	F	R2	STUDIO	W4	27.1	27.1	0.0	0.0	69.5	69.5	0.0	0.0	41	5	41	5	0	0
F02	G	R1	STUDIO	W1	34.6	34.6	0.0	0.0	97.4	97.4	0.0	0.0	55	19	55	19	0	0
		R2	KITCHEN	W2	28.6	28.6	0.0	0.0	99.2	99.2	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A

Window Map

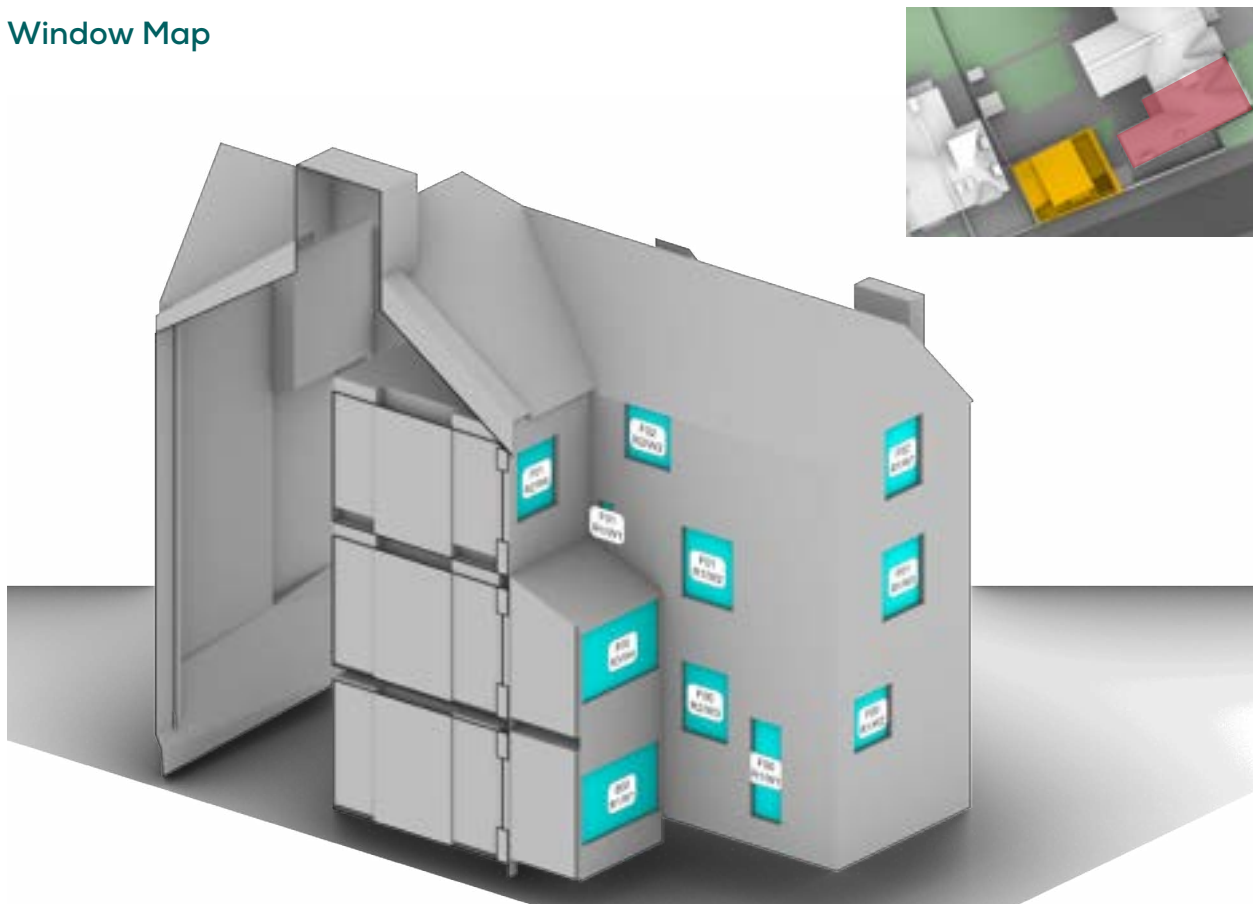


Figure 09: Window Map 115 Ferme Park Road

117 FERME PARK ROAD

117 Ferme Park Road is located directly to the East of the Proposed Development. No information was obtained during our research for this property. Therefore, layouts corresponding to a residential property similar to that at 115 Ferme Park Road were assumed for the analysis.

Existing vs Proposed

PROJECT NO: 18480
RELEASE: 01
EXISTING V PROPOSED

DAYLIGHT AND SUNLIGHT ANALYSIS
2C LANDROCK RD

					VSC (WINDOWS)				NSL				ANNUAL PROBABLE SUNLIGHT HOURS					
FLOOR	FLAT	ROOM	ROOM USE	WINDOW	EXISTING	PROPOSED	LOSS	%	EXISTING	PROPOSED	LOSS	%	ROOM EXISTING		ROOM PROPOSED		TOTAL % LOSS	WINTER % LOSS
													TOTAL	WINTER	TOTAL	WINTER		
FERME PARK 117																		
B00	O	R1	STUDIO	W1	6.6	6.6	0.0	0.0	35.6	33.0	2.6	7.3	8	0	8	0	0	0
F00	B	R1	STUDIO	W1	26.1	24.4	1.7	6.5	93.6	93.6	0.0	0.0	51	16	46	11	9.8	31.3
				W2	11.1	10.3	0.8	7.2										
	C	R2	STUDIO	W3	13.1	13.0	0.1	0.8	53.8	53.8	0.0	0.0	19	3	18	2	5.3	33.3
F01	D	R1	STUDIO	W1	30.8	30.8	0.0	0.0	97.9	97.9	0.0	0.0	65	17	65	17	0	0
				W2	17.5	17.5	0.0	0.0										
	E	R2	STUDIO	W3	26.5	26.5	0.0	0.0	61.3	61.3	0.0	0.0	38	7	38	7	0	0
F02	G	R1	STUDIO	W1	33.6	33.6	0.0	0.0	98.6	98.6	0.0	0.0	82	21	82	21	0	0
				W2	24.4	24.4	0.0	0.0										

Window Map

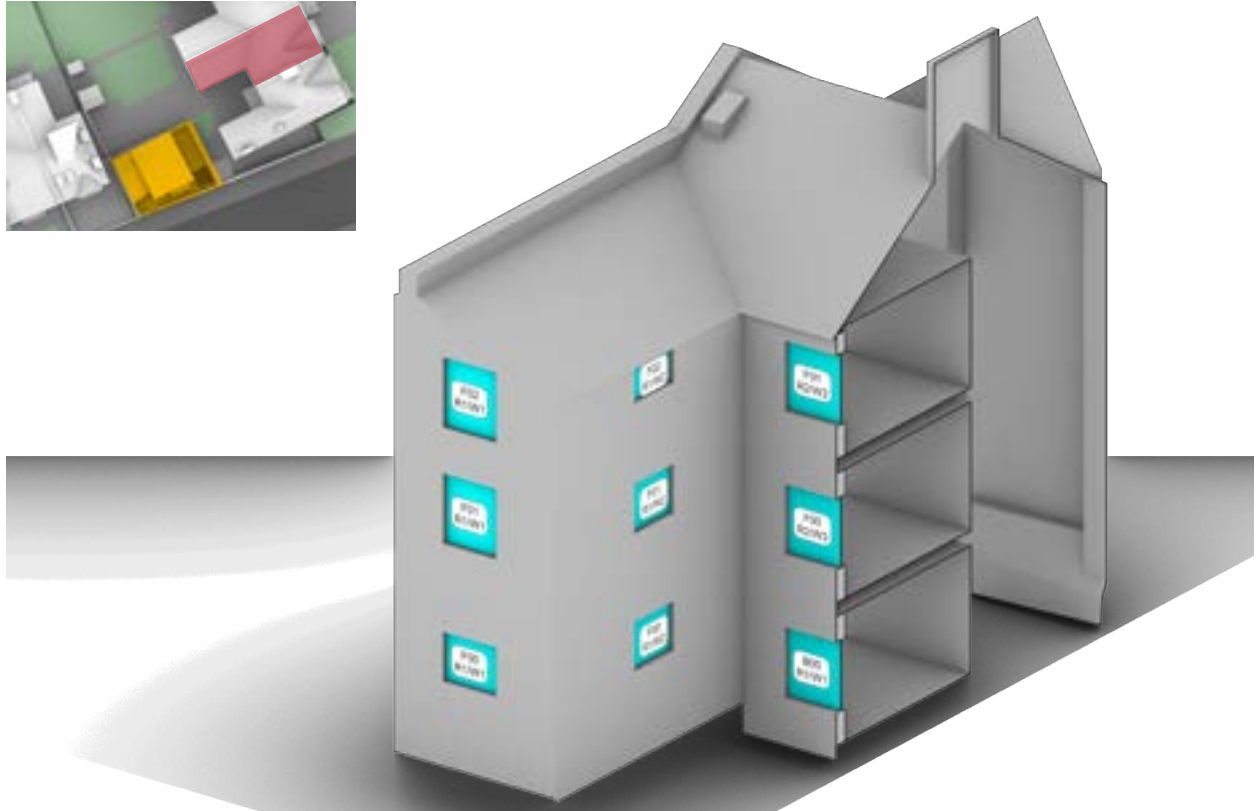


Figure 10: Window Map 117 Ferme Park Road

8 CONCLUSIONS

GIA have undertaken a daylight and sunlight assessment in relation to the Proposed Development at 2C Landrock Road. The technical analysis has been undertaken in accordance with the BRE handbook.

Our technical analysis shows that, following the implementation of the proposed development, it is unlikely that the occupants of the surrounding properties will experience significant changes in their daylight or sunlight amenity.

To conclude, these results are considered to be excellent and in line with the stated in the BRE recommendations.



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